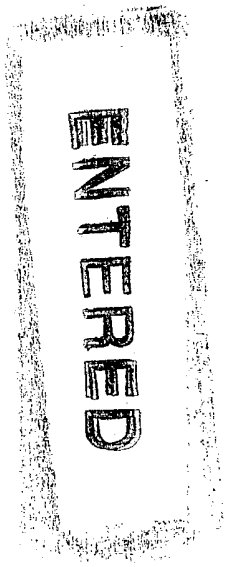
IFWO

RAW SEQUENCE LISTING DATE: 08/30/2004
PATENT APPLICATION: **US/10/698,959** TIME: 12:53:32

Input Set : **N:\Crf3\RULE60\10698959.raw**
Output Set: **N:\CRF4\08302004\J698959.raw**




```
 1 <110> APPLICANT: Khoja, Hamiduddin
 2       Shyamala, Venkatakrishna
 3 <120> TITLE OF INVENTION: Isolated VSHK-1 Receptor Polypeptides
 4       and Methods of Use Thereof
 5 <130> FILE REFERENCE: 2300-1544
 6 <140> CURRENT APPLICATION NUMBER: US/10/698,959
 7 <141> CURRENT FILING DATE: 2003-10-30
 8 <150> PRIOR APPLICATION NUMBER: US/09/433,360
 9 <151> PRIOR FILING DATE: 1999-11-03
10 <150> PRIOR APPLICATION NUMBER: 60/107,112
11 <151> PRIOR FILING DATE: 1998-11-04
12 <150> PRIOR APPLICATION NUMBER: 60/114,856
13 <151> PRIOR FILING DATE: 1999-01-06
14 <160> NUMBER OF SEQ ID NOS: 14
15 <170> SOFTWARE: FastSEQ for Windows Version 4.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 1958
19 <212> TYPE: DNA
20 <213> ORGANISM: Homo sapiens
21 <400> SEQUENCE: 1
22       aaaagtagct ggagttaggt catttgattt tatactctgt actcaagact gctcctctct      60
23       gccgactaca acagattgga gccatggctt tggagcagaa ccagtcaaca gattattatt     120
24       atgaggaaaa tgaaatgaat ggcacttatg actacagtca atatgaactg atctgtatca     180
25       aagaagatgt cagagaattt gcaaaagttt tcctccctgt attcctcaca atagttttcg     240
26       tcattggact tgcaggcaat tccatggtag tggcaattta tgcctattac aagaaacaga     300
27       gaaccaaaac agatgtgtac atcctgaatt tggctgtagc agatttactc cttctattca     360
28       ctctgccttt ttgggctgtt aatgcagttc atgggtgggt tttagggaaa ataatgtgca     420
29       aaataacttc agccttgtac acactaaact ttgtctctgg aatgcagttt ctggcttgta     480
30       tcagcataga cagatatgtg gcagtaacta aagtccccag ccaatcagga gtgggaaaac     540
31       catgctggat catctgtttc tgtgtctgga tggctgccat cttgctgagc ataccccagc     600
32       tggtttttta tacagtaaat gacaatgcta ggtgcattcc cattttcccc cgctacctag     660
33       gaacatcaat gaaagcattg attcaaatgc tagagatctg cattggattt gtagtaccct     720
34       ttcttattat gggggtgtgc tactttatca cagcaaggac actcatgaag atgccaaaca     780
35       ttaaaatatc tcgacccctа aaagttctgc tcacagtcgt tatagttttc attgtcactc     840
36       aactgcctta taacattgtc aagttctgcc gagccataga catcatctac tccctgatca     900
37       ccagctgcaa catgagcaaa cgcatggaca tcgccatcca agtcacagaa agcatcgcac     960
38       tctttcacag ctgcctcaac ccaatccttt atgtttttat gggagcatct ttcaaaaact    1020
39       acgttatgaa agtggccaag aaatatgggt cctggagaag acagagacaa agtgtggagg    1080
40       agtttccttt tgattctgag ggtcctacag agccaaccag tacttttagc atttaaaggt    1140
41       aaaactgctc tgccttttgc ttggatacat atgaatgatg ctttcccctc aaataaaaca    1200
42       tctgcattat tctgaaactc aaatctcaga cgccgtggtt gcaacttata ataaagaatg    1260
43       ggttgggggа aggggagaa ataaaagcca agaagaggaa acaagataat aaatgtacaa    1320
44       aacatgaaaa ttaaaatgaa caatatagga aaataattgt aacaggcata agtgaataac    1380
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actctgctgt aacgaagaag agctttgtgg tgataatttt gtatcttggt tgcagtggtg 1440
cttatacaaa tctacacaag tgataaaatg acacagaact atatacacac attgtaccaa 1500
tttcaatttc ctggttttga cattatagta taattatgta agatggaacc attggggaaa 1560
actgggtgaa gggtacccag gaccactctg taccatcttt gtaacttcct gtgaatttat 1620
aataatttca aaataaaaca agttaaaaaa aaacccacta tgctataagt taggccatct 1680
aaaacagatt attaaagagg ttcatgttaa aaggcattta taattatttt taattatcta 1740
agttttaata caagaacgat ttccctgcat aattttagta cttgaataag tatgcagcag 1800
aactccaact atctttttc ctgttttttt taaatttgta agtaatttta taaaatccac 1860
ctcctccaaa aaagcaataa aaaaaaaaca aactataaaa aaaaaaaaaa aaaaaaaaaa 1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 1958

<210> SEQ ID NO: 2
<211> LENGTH: 350
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 2

```
Met Ala Leu Glu Gln Asn Gln Ser Thr Asp Tyr Tyr Tyr Glu Glu Asn
 1               5                  10                  15
Glu Met Asn Gly Thr Tyr Asp Tyr Ser Gln Tyr Glu Leu Ile Cys Ile
            20                  25                  30
Lys Glu Asp Val Arg Glu Phe Ala Lys Val Phe Leu Pro Val Phe Leu
        35                  40                  45
Thr Ile Val Phe Val Ile Gly Leu Ala Gly Asn Ser Met Val Val Ala
    50                  55                  60
Ile Tyr Ala Tyr Tyr Lys Lys Gln Arg Thr Lys Thr Asp Val Tyr Ile
65                  70                  75                  80
Leu Asn Leu Ala Val Ala Asp Leu Leu Leu Leu Phe Thr Leu Pro Phe
                85                  90                  95
Trp Ala Val Asn Ala Val His Gly Trp Val Leu Gly Lys Ile Met Cys
            100                 105                 110
Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe Val Ser Gly Met Gln
        115                 120                 125
Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val Ala Val Thr Lys Val
    130                 135                 140
Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp Ile Ile Cys Phe Cys
145                 150                 155                 160
Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro Gln Leu Val Phe Tyr
                165                 170                 175
Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile Phe Pro Arg Tyr Leu
            180                 185                 190
Gly Thr Ser Met Lys Ala Leu Ile Gln Met Leu Glu Ile Cys Ile Gly
        195                 200                 205
Phe Val Val Pro Phe Leu Ile Met Gly Val Cys Tyr Phe Ile Thr Ala
    210                 215                 220
Arg Thr Leu Met Lys Met Pro Asn Ile Lys Ile Ser Arg Pro Leu Lys
225                 230                 235                 240
Val Leu Leu Thr Val Val Ile Val Phe Ile Val Thr Gln Leu Pro Tyr
                245                 250                 255
Asn Ile Val Lys Phe Cys Arg Ala Ile Asp Ile Ile Tyr Ser Leu Ile
            260                 265                 270
```

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```
     Thr Ser Cys Asn Met Ser Lys Arg Met Asp Ile Ala Ile Gln Val Thr
              275                 280                 285
     Glu Ser Ile Ala Leu Phe His Ser Cys Leu Asn Pro Ile Leu Tyr Val
         290                 295                 300
     Phe Met Gly Ala Ser Phe Lys Asn Tyr Val Met Lys Val Ala Lys Lys
      305                 310                 315                 320
      Tyr Gly Ser Trp Arg Arg Gln Arg Gln Ser Val Glu Glu Phe Pro Phe
                      325                 330                 335
      Asp Ser Glu Gly Pro Thr Glu Pro Thr Ser Thr Phe Ser Ile
                  340                 345                 350
<210> SEQ ID NO: 3
<211> LENGTH: 23
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 3
      actaccaaca ggttggtact tta                                          23
<210> SEQ ID NO: 4
<211> LENGTH: 22
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 4
      ctttgccatc tagagtggag cc                                           22
<210> SEQ ID NO: 5
<211> LENGTH: 82
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: (1)...(82)
<223> OTHER INFORMATION: n = A,T,C or G
<223> OTHER INFORMATION: encodes synthetic peptide
W--> 129 <400> 5
W--> 130      ctttctattc tcactccgct gaannsnnsn nsnnsnnsnn snnsnnsnns nnsnnsnnsn      60
     131      nsnnsccgcc tccacctcca cc                                           82
<210> SEQ ID NO: 6
<211> LENGTH: 93
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: (1)...(93)
<223> OTHER INFORMATION: n = inosine
<223> OTHER INFORMATION: encodes synthetic peptide
W--> 142 <400> 6
W--> 143      ggccggtgga ggtggaggcg gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      60
     144      nnnnnnttca gcggagtgag aatagaaagg tac                                93
<210> SEQ ID NO: 7
<211> LENGTH: 36
<212> TYPE: DNA
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Output Set: **N:\CRF4\08302004\J698959.raw**

149 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: primer
152 <400> SEQUENCE: 7
153 gctgcccgag agatctgtat atatgagtaa acttgg 36
155 <210> SEQ ID NO: 8
156 <211> LENGTH: 36
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <223> OTHER INFORMATION: primer
161 <400> SEQUENCE: 8
162 gcaggctcgg gaattcggga aatgtgcgcg gaaccc 36
164 <210> SEQ ID NO: 9
165 <211> LENGTH: 21
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: mutagenic oligonucleotides
170 <400> SEQUENCE: 9
171 aaacttcctc atgaaaaagt c 21
173 <210> SEQ ID NO: 10
174 <211> LENGTH: 25
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: mutagenic oligonucleotides
179 <400> SEQUENCE: 10
180 agaatagaaa ggtaccacta aagga 25
182 <210> SEQ ID NO: 11
183 <211> LENGTH: 39
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: mutagenic oligonucleotides
188 <400> SEQUENCE: 11
189 tttagtggta cctttctatt ctcactcggc cgaaactgt 39
191 <210> SEQ ID NO: 12
192 <211> LENGTH: 24
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: mutagenic oligonucleotides
197 <400> SEQUENCE: 12
198 aaagcgcagt ctctgaattt accg 24
200 <210> SEQ ID NO: 13
201 <211> LENGTH: 22
202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence

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Input Set : **N:\Crf3\RULE60\10698959.raw**
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204 <220> FEATURE:
205 <223> OTHER INFORMATION: primers
206 <400> SEQUENCE: 13
207 tcgaaagcaa gctgataaac cg 22
209 <210> SEQ ID NO: 14
210 <211> LENGTH: 23
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: primers
215 <400> SEQUENCE: 14
216 acagacagcc ctcatagtta gcg 23

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/30/2004
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Input Set : **N:\Crf3\RULE60\10698959.raw**
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 24,25,27,28,30,31,33,34,36,37,39,40,42,43,45,46,48,49,51,52
Seq#:5; N Pos. 54,55,57,58,60,61,63,64
Seq#:6; N Pos. 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41
Seq#:6; N Pos. 42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61
Seq#:6; N Pos. 62,63,64,65,66

VERIFICATION SUMMARY DATE: 08/30/2004
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Input Set : **N:\Crf3\RULE60\10698959.raw**
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L:129 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:142 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
M:341 Repeated in SeqNo=6